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Glenn et al.

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(54) **GAMING MACHINE**

D264,485 S 5/1982 Kitchen
4,372,557 A 2/1983 Del Principe et al.
4,373,725 A 2/1983 Ritchie
(Continued)

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FOREIGN PATENT DOCUMENTS

EP 649 671 A1 4/1995
JP 03210172 B2 9/2001
(Continued)

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OTHER PUBLICATIONS

(**) Term: **15 Years**

AU Optronics Corp.; News Center. "AUO Announces Multiple Upcoming Innovations"; Oct. 27, 2008; retrieved from <<http://www.auo.com/?sn=107&lang=en-US&c=10&n=363>> on Mar. 3, 2017 (2 pages).

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USPC **D21/369**

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(58) **Field of Classification Search**

(57) **CLAIM**

The ornamental design for a gaming machine, as shown and described.

USPC D21/369, 370, 371, 385, 329, 325, 394;
D14/307, 172, 129, 325, 401, 371, 126,
D14/439, 432, 450, 128, 375, 248, 374,
D14/341, 138 G, 127; 463/28, 13, 11,
463/16, 20, 25, 31, 46, 23, 30, 17, 36, 29,
463/42, 34, 32, 35, 19, 21, 22; 273/292,
273/203, 138.2, 143 R, 142 R, 138.1;
D19/60; D16/226; D8/335, 331, 334;
D26/141; D7/641
CPC G07F 17/32; G07F 17/34; G07F 17/3211;
G07F 17/3244; G07F 17/3267
See application file for complete search history.

DESCRIPTION

FIG. 1 is a front top right perspective view of a gaming machine showing our new design;
FIG. 2 is a front bottom left perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a left side view thereof; and,
FIG. 6 is a top view thereof.

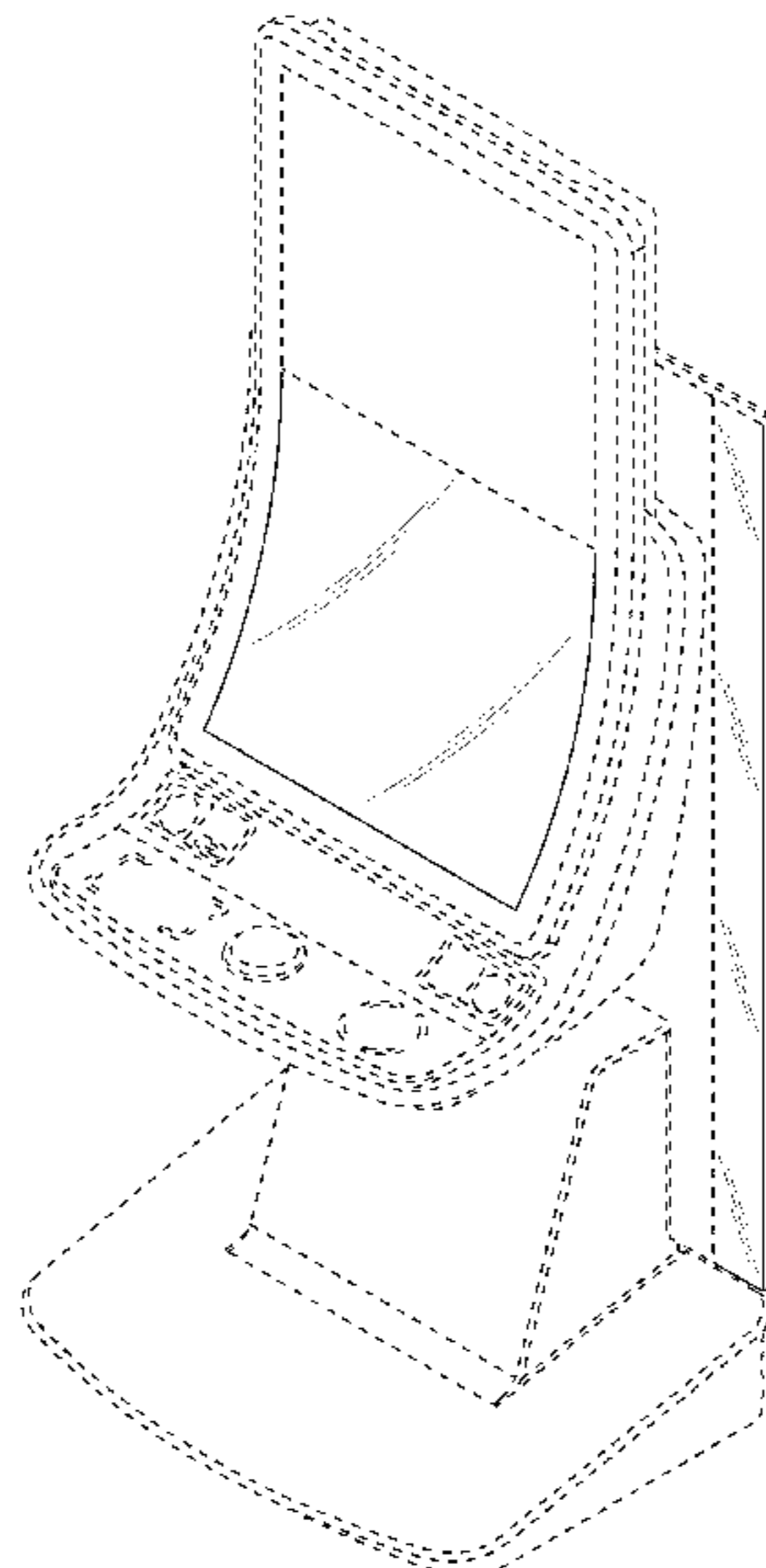
The broken lines immediately adjacent to a shaded area define the bounds of the claimed design and form no part thereof. The broken lines depicting the remainder of the gaming machine show features that form no part of the claimed design. The curved oblique and oblique line shading shows that the surface is curved and is a transparent, translucent, highly polished or reflective surface.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,661,954 A 12/1953 Koci
D236,720 S 9/1975 Baker
D238,379 S 1/1976 Miller
4,046,419 A 9/1977 Schmitt

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D275,772 S	10/1984	Akopian et al.	5,720,480 A	2/1998	Lawlor et al.
D280,835 S	10/1985	Berge et al.	D395,463 S	6/1998	Scott et al.
D280,836 S	10/1985	Ludzia et al.	5,762,617 A	6/1998	Infanti
4,606,545 A	8/1986	Ritchie	5,791,731 A	8/1998	Infanti
4,705,274 A	11/1987	Lubeck	5,806,851 A	9/1998	Gomez et al.
4,840,343 A	6/1989	Gasser	5,820,460 A	10/1998	Fulton
4,861,037 A	8/1989	Oursler	5,833,236 A	11/1998	Oursler et al.
D307,771 S *	5/1990	Cesaroni D21/370	D405,473 S	2/1999	Tikhonski et al.
4,930,117 A	5/1990	Huggins	D406,612 S *	3/1999	Johnson D21/327
4,981,298 A	1/1991	Lawlor et al.	D407,759 S	4/1999	Isetani et al.
D315,110 S	3/1991	Slater	D408,366 S	4/1999	Popadiuk
5,015,189 A	5/1991	Wenzinger	5,890,715 A	4/1999	Gomez et al.
D318,660 S	7/1991	Weber	5,899,454 A	5/1999	Eddy et al.
5,074,558 A	12/1991	Bleich et al.	5,924,690 A	7/1999	Kopera et al.
5,083,738 A	1/1992	Infanti	5,934,672 A	8/1999	Sines et al.
5,091,677 A	2/1992	Bleich et al.	5,938,195 A	8/1999	Anghelo et al.
5,102,192 A	4/1992	Barile, Sr.	5,944,309 A	8/1999	Popadiuk et al.
5,110,120 A	5/1992	Smolucha	D417,145 S	11/1999	McLaughlin
5,114,112 A	5/1992	Infanti	5,984,782 A	11/1999	Inoue
5,120,058 A	6/1992	Trudeau et al.	6,000,697 A	12/1999	Popadiuk et al.
5,123,647 A	6/1992	Lawlor et al.	D419,201 S	1/2000	de Haas
5,143,055 A	9/1992	Eakin	D419,606 S	1/2000	Toriyama
5,149,094 A	9/1992	Tastad	6,036,188 A	3/2000	Gomez et al.
D333,164 S	2/1993	Kraft et al.	6,047,962 A	4/2000	Popadiuk
5,193,807 A	3/1993	Schilling et al.	6,047,963 A	4/2000	Pierce
5,195,746 A	3/1993	Boyd et al.	D424,122 S *	5/2000	Dickenson D21/325
D335,150 S	4/1993	Biagi et al.	6,071,190 A	6/2000	Weiss et al.
5,226,653 A	7/1993	Bil et al.	D428,062 S	7/2000	Hayashi
5,232,191 A	8/1993	Infanti	6,089,663 A	7/2000	Hill
5,290,034 A	3/1994	Hineman	D428,864 S *	8/2000	Rooyackers D14/306
5,297,793 A	3/1994	DeMar et al.	6,102,394 A	8/2000	Wurz et al.
5,316,303 A	5/1994	Trudeau et al.	6,113,097 A	9/2000	Krutsch et al.
5,322,283 A	6/1994	Ritchie et al.	6,117,010 A	9/2000	Canterbury et al.
5,326,104 A	7/1994	Pease et al.	6,120,021 A	9/2000	Piotrowski et al.
5,350,174 A	9/1994	Ritchie et al.	6,129,353 A	10/2000	DeMar et al.
D351,869 S	10/1994	Rothschild et al.	6,129,355 A	10/2000	Hahn et al.
5,351,954 A	10/1994	Oursler et al.	6,135,449 A	10/2000	Cornell et al.
5,357,104 A	10/1994	Bleich	6,135,562 A	10/2000	Infanti
5,358,241 A	10/1994	Anghelo et al.	6,149,153 A	11/2000	Sheats, Jr.
5,358,242 A	10/1994	Trudeau et al.	6,155,565 A	12/2000	Gomez et al.
5,358,243 A	10/1994	Eddy et al.	6,155,925 A	12/2000	Giobbi et al.
D352,738 S	11/1994	Anghelo et al.	6,158,737 A	12/2000	Cornell et al.
5,383,663 A	1/1995	Anghelo et al.	6,159,098 A	12/2000	Slomiany et al.
5,405,144 A	4/1995	Ritchie et al.	6,164,644 A	12/2000	Cornell et al.
5,409,296 A	4/1995	Barile	6,173,955 B1	1/2001	Perrie et al.
5,411,257 A	5/1995	Fulton	6,199,861 B1	3/2001	Hume et al.
5,415,402 A	5/1995	Morrison et al.	D439,931 S	4/2001	Yamaguchi
5,415,403 A	5/1995	Ritchie et al.	6,210,279 B1	4/2001	Dickinson
5,417,423 A	5/1995	Oursler et al.	6,224,482 B1	5/2001	Bennett
5,417,425 A	5/1995	Blumberg et al.	6,227,614 B1	5/2001	Rubin
5,437,453 A	8/1995	Hineman	6,227,970 B1	5/2001	Shimizu et al.
5,465,963 A	11/1995	Patla, Sr.	D443,313 S	6/2001	Brettschneider
5,472,197 A	12/1995	Gwiasda et al.	D446,252 S	8/2001	Yamaguchi
5,494,286 A	2/1996	DeMar et al.	6,283,546 B1	9/2001	Hill
5,507,488 A	4/1996	Eddy et al.	6,290,229 B1	9/2001	Perez
5,511,783 A	4/1996	Popadiuk et al.	D450,094 S	11/2001	Hedrick et al.
5,516,103 A	5/1996	Lawlor et al.	6,334,612 B1	1/2002	Wurz et al.
5,522,641 A	6/1996	Infanti	6,354,660 B1	3/2002	Friedrich
5,524,887 A	6/1996	Trudeau et al.	D459,402 S	6/2002	Wurz et al.
5,533,726 A	7/1996	Nordman et al.	D460,915 S *	7/2002	Lynch D21/329
5,542,748 A	8/1996	Barile	6,422,670 B1	7/2002	Hedrick et al.
D376,391 S	12/1996	Okumura	6,422,941 B1	7/2002	Thorner et al.
5,580,052 A	12/1996	Popadiuk et al.	6,439,993 B1	8/2002	O'Halloran
D378,604 S *	3/1997	Brettschneider D21/370	D463,504 S	9/2002	Stephan
5,632,482 A	5/1997	Anghelo	D464,377 S	10/2002	Wurz et al.
D380,014 S	6/1997	Yang	D465,813 S	11/2002	Randall
D381,700 S *	7/1997	Brettschneider D21/370	D466,160 S	11/2002	Hirato et al.
5,655,965 A	8/1997	Takemoto et al.	D467,977 S	12/2002	Gatto et al.
5,664,777 A	9/1997	Nordman et al.	D468,364 S	1/2003	Beadell et al.
5,669,818 A	9/1997	Thorner et al.	6,530,842 B1	3/2003	Wells et al.
5,678,886 A	10/1997	Infanti	6,530,872 B2	3/2003	Frehland et al.
D388,469 S *	12/1997	Dickenson D21/325	6,572,187 B2	6/2003	Laufer
5,697,612 A	12/1997	Piotrowski et al.	6,589,114 B2	7/2003	Rose
5,704,835 A	1/1998	Dietz, II	6,609,972 B2	8/2003	Seelig et al.
5,707,059 A	1/1998	Sullivan et al.	6,616,142 B2	9/2003	Adams
			6,620,047 B1	9/2003	Alcorn et al.
			D481,078 S	10/2003	Stephan
			6,646,695 B1	11/2003	Gauselmann
			6,652,378 B2	11/2003	Cannon et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

D483,075 S	12/2003	Kang	
D484,548 S	12/2003	Franco Munoz et al.	
D485,583 S	1/2004	Porto	
6,695,697 B1 *	2/2004	Okada	G07F 17/32 273/143 R
6,715,756 B2	4/2004	Inoue	
6,729,618 B1	5/2004	Koenig et al.	
D492,363 S	6/2004	Seelig et al.	
D492,364 S	6/2004	Seelig et al.	
D492,365 S	6/2004	Munoz et al.	
D492,676 S *	7/2004	Monson	D14/306
D493,843 S	8/2004	Jackson, Sr. et al.	
D493,846 S	8/2004	Seelig et al.	
D495,754 S	9/2004	Wurz et al.	
D495,755 S *	9/2004	Wurz	D21/325
D496,407 S *	9/2004	Gadda	D21/325
D498,267 S	11/2004	Crouch	
D500,098 S	12/2004	Doi	
6,880,825 B2	4/2005	Seelig et al.	
D505,162 S	5/2005	Bristol et al.	
D508,268 S	8/2005	Hanchar et al.	
D508,269 S	8/2005	Wichinsky	
D508,719 S	8/2005	de Haas	
D508,961 S	8/2005	Gatto et al.	
D509,254 S	9/2005	Rasmussen et al.	
D509,255 S	9/2005	Bristol et al.	
D512,105 S	11/2005	Chitrapongse et al.	
D513,511 S	1/2006	Decombe	
D515,144 S	2/2006	Boyd	
6,997,810 B2	2/2006	Cole	
D520,504 S *	5/2006	Martin	D14/305
7,063,615 B2	6/2006	Alcorn et al.	
7,108,237 B2	9/2006	Gauselmann	
D531,677 S	11/2006	Mallory et al.	
7,184,277 B2	2/2007	Beirne	
D537,885 S	3/2007	Gadda et al.	
D539,854 S	4/2007	Luciano et al.	
D540,398 S	4/2007	Gadda et al.	
D546,893 S	7/2007	Yamashita	
7,247,098 B1	7/2007	Bradford et al.	
D548,801 S	8/2007	Groswirt	
D549,785 S	8/2007	Luciano, Jr. et al.	
7,267,612 B2	9/2007	Alcorn et al.	
D554,710 S	11/2007	Malone et al.	
D556,765 S	12/2007	Evans et al.	
D557,348 S *	12/2007	Gutknecht	D21/370
D557,748 S	12/2007	Jumper	
D559,328 S	1/2008	Rasmussen et al.	
D559,917 S	1/2008	Cole	
D560,724 S	1/2008	Johnson	
D560,725 S	1/2008	Johnson	
D563,326 S	3/2008	Patel et al.	
D563,481 S	3/2008	Looks et al.	
D564,600 S	3/2008	Greenberg et al.	
D564,601 S	3/2008	Strahinic et al.	
D566,197 S	4/2008	Greenberg et al.	
D569,863 S	5/2008	Feldstein et al.	
D572,314 S	7/2008	Vallejo et al.	
D578,168 S	10/2008	Looks et al.	
D581,983 S	12/2008	Bergstrom	
RE40,625 E	1/2009	Wurz et al.	
7,479,066 B2	1/2009	Emori	
D586,866 S *	2/2009	Hsu	D21/370
D587,272 S	2/2009	Morrow et al.	
D587,319 S	2/2009	Moises Deiab	
RE40,671 E	3/2009	Wurz et al.	
7,503,849 B2	3/2009	Hornik et al.	
D590,025 S	4/2009	Fiore	
D592,709 S *	5/2009	McComb	D21/370
D594,068 S	6/2009	Hsu	
D596,678 S *	7/2009	Myers	D21/370
D599,365 S	9/2009	Brown et al.	
D599,858 S	9/2009	Lesley et al.	
D599,859 S *	9/2009	Lesley	D21/370
D599,860 S	9/2009	Lesley et al.	
D601,637 S	10/2009	Myers et al.	
D601,638 S	10/2009	Palmisano	
D604,368 S	11/2009	Lesley et al.	
D605,189 S *	12/2009	Kuroda	D14/307
D605,231 S *	12/2009	Hashimoto	D21/325
7,628,693 B2	12/2009	Thomas	
7,666,085 B2	2/2010	Vorias et al.	
D612,432 S *	3/2010	De Viveiros Ortiz	D21/325
7,686,689 B2	3/2010	Thomas	
D613,802 S *	4/2010	Meyers	D21/370
D615,598 S	5/2010	McComb et al.	
D616,036 S *	5/2010	Cha	D21/325
D616,039 S *	5/2010	Bruzzese	D21/370
7,713,119 B2	5/2010	Pacey et al.	
D619,177 S *	7/2010	Lee	D21/325
D622,780 S	8/2010	Lesley et al.	
D622,781 S	8/2010	Lesley et al.	
D622,782 S	8/2010	Chudek et al.	
D623,621 S *	9/2010	Roed	D14/127
D624,604 S	9/2010	Wudtke	
D625,368 S	10/2010	Nelson et al.	
D626,182 S	10/2010	Cole et al.	
D626,183 S	10/2010	Cole et al.	
7,811,167 B2	10/2010	Giobbi et al.	
D631,060 S	1/2011	Flik et al.	
D631,100 S	1/2011	Palmisano	
D633,950 S	3/2011	Terpstra et al.	
D637,238 S	5/2011	O'Keene et al.	
D637,652 S	5/2011	Tahara et al.	
7,938,728 B2	5/2011	Vetter et al.	
7,955,176 B2	6/2011	Tastad et al.	
D641,047 S	7/2011	Tahara et al.	
7,976,393 B2	7/2011	Haga et al.	
7,985,139 B2	7/2011	Lind et al.	
8,002,424 B2	8/2011	Hwang et al.	
8,002,626 B2	8/2011	Englman	
D646,336 S	10/2011	Kelly et al.	
D646,337 S	10/2011	Kelly et al.	
D646,691 S	10/2011	Thai et al.	
D649,605 S	11/2011	Terpstra et al.	
D651,608 S	1/2012	Allen et al.	
8,152,623 B2	4/2012	Fiden	
8,162,740 B2	4/2012	Aoki	
8,216,061 B2	7/2012	Pacey	
8,267,764 B1	9/2012	Aoki et al.	
D669,076 S	10/2012	Haller	
8,292,451 B2	10/2012	Hwang et al.	
8,303,420 B2	11/2012	Chudek et al.	
8,305,743 B2	11/2012	Wu et al.	
8,323,114 B2	12/2012	Burak et al.	
D673,620 S	1/2013	Johnson et al.	
D673,621 S *	1/2013	Johnson	D21/369
D673,622 S	1/2013	Wudtke	
8,353,755 B2	1/2013	Vann et al.	
8,371,920 B2	2/2013	Gomez et al.	
8,371,927 B2	2/2013	Englman	
8,371,928 B2	2/2013	Englman et al.	
8,376,832 B2	2/2013	O'Connor et al.	
D677,736 S *	3/2013	Dorn	D21/370
D678,270 S *	3/2013	Song	D14/341
D678,955 S	3/2013	Lesley et al.	
D678,956 S	3/2013	Lesley et al.	
D678,957 S	3/2013	Cesaroni et al.	
D678,958 S	3/2013	Cesaroni et al.	
D681,130 S	4/2013	Lesley et al.	
8,430,756 B2	4/2013	McComb et al.	
D682,948 S	5/2013	Cesaroni et al.	
D684,637 S *	6/2013	Shelley	D21/370
D684,639 S *	6/2013	Shelley	D21/370
D685,033 S	6/2013	Wudtke	
D691,665 S	10/2013	Chudek	
D691,666 S	10/2013	Lesley et al.	
D693,343 S	11/2013	Haller	
D697,558 S *	1/2014	Myers	D21/325
D704,273 S	5/2014	Chudek	
D704,275 S *	5/2014	Lesley	D21/370
D705,872 S *	5/2014	Ortiz	D21/370
D706,359 S	6/2014	Wudtke	
D706,741 S	6/2014	Myers	

(56)

References Cited

U.S. PATENT DOCUMENTS

- D707,646 S * 6/2014 Kim D14/138 G
D708,676 S * 7/2014 Ballman D14/307
D712,975 S * 9/2014 Lesley D21/369
D713,447 S * 9/2014 Balar D18/4.6
D713,811 S * 9/2014 Isaacs D14/138 AA
D714,269 S * 9/2014 Lee D14/248
D714,270 S * 9/2014 Lee D14/248
D714,271 S * 9/2014 Lee D14/248
D714,392 S * 9/2014 Arabian D21/369
D714,875 S 10/2014 Wudtke et al.
D715,279 S * 10/2014 Lee D14/248
D715,364 S 10/2014 Wudtke et al.
D716,246 S * 10/2014 Yun D14/138 R
D718,818 S * 12/2014 Sumii D14/401
D719,615 S * 12/2014 Inoue D21/370
D719,616 S * 12/2014 Inoue D21/370
D721,767 S * 1/2015 Ferrazoli D21/370
8,982,545 B2 3/2015 Kim et al.
D726,139 S * 4/2015 Park D14/138 R
D726,140 S * 4/2015 Park D14/138 R
D726,678 S * 4/2015 Park D14/138 R
D727,431 S * 4/2015 Themann D21/370
D730,993 S * 6/2015 Castro D21/370
D732,520 S * 6/2015 Themann D14/307
D733,088 S * 6/2015 Garneau D14/172
D736,751 S * 8/2015 Lee D14/248
D736,752 S * 8/2015 Lee D14/248
D740,887 S * 10/2015 Randazzo D21/370
D740,888 S 10/2015 DePalma et al.
D742,974 S * 11/2015 Lesley D21/369
D742,975 S * 11/2015 Myers D21/370
D747,763 S * 1/2016 Haller D18/4.5
D752,573 S * 3/2016 Ballman D14/307
D760,846 S * 7/2016 Castro D21/370
D762,613 S * 8/2016 Garneau D14/172
RE46,169 E 10/2016 Kelly et al.
D770,449 S * 11/2016 Bae D14/341
D770,450 S * 11/2016 Bae D14/341
D770,998 S * 11/2016 Kwak D14/138 AB
D771,628 S * 11/2016 Bae D14/341
D776,112 S * 1/2017 Bae D14/374
D786,859 S * 5/2017 Kim D14/341
9,679,435 B2 * 6/2017 Schrementi G07F 17/3213
D792,384 S * 7/2017 Kim D14/248
D795,855 S * 8/2017 Kim D14/248
D797,713 S * 9/2017 Kim D14/248
D801,435 S * 10/2017 Themann D21/369
D801,945 S * 11/2017 Cho D14/138 G
D802,590 S * 11/2017 Bae D14/374
D802,591 S * 11/2017 Bae D14/374
D803,323 S * 11/2017 Bussey D21/369
D803,324 S * 11/2017 Bussey D21/370
D803,818 S * 11/2017 Kim D14/248
D805,065 S * 12/2017 Taylor D14/307
D806,159 S * 12/2017 Haller D18/4.5
D808,354 S * 1/2018 Castro D14/127
D808,467 S * 1/2018 Huang D21/369
D809,068 S * 1/2018 Ballman D21/369
D809,069 S * 1/2018 Ballman D21/369
D811,384 S * 2/2018 Diasabeygunawardena
D812,145 S * 3/2018 Huang D14/336
D812,146 S * 3/2018 Castro D21/369
D812,147 S 3/2018 Castro et al.
D812,148 S * 3/2018 Castro D21/369
D812,149 S 3/2018 Castro et al.
D813,954 S 3/2018 Calhoun et al.
D818,048 S * 5/2018 Calhoun D21/369
D818,524 S * 5/2018 Dong D18/4.4
D819,747 S * 6/2018 Castro D21/369
D820,915 S 6/2018 Lee et al.
D832,355 S * 10/2018 Castro D21/369
D832,356 S * 10/2018 Castro D21/369
D832,357 S * 10/2018 Castro D21/369
D836,164 S * 12/2018 Castro D21/369
- D836,720 S * 12/2018 Kang D19/113
10,181,236 B2 * 1/2019 Goldstein G07F 17/3216
D842,929 S * 3/2019 Hung D21/325
D842,930 S * 3/2019 Johnson D21/369
D842,933 S * 3/2019 Castro D21/396
D843,458 S * 3/2019 Castro D21/369
D843,459 S * 3/2019 Castro D21/369
D843,460 S * 3/2019 Castro D21/369
D843,461 S * 3/2019 Castro D21/369
D843,465 S * 3/2019 Castro D21/369
D843,467 S * 3/2019 Johnson D21/369
D843,468 S * 3/2019 Johnson D21/369
D843,474 S * 3/2019 Lesley D21/369
D843,475 S * 3/2019 Lesley D21/369
D843,476 S * 3/2019 Lesley D21/369
D843,477 S * 3/2019 Lesley D21/369
D843,478 S * 3/2019 Lesley D21/369
D843,479 S * 3/2019 Castro D21/369
D843,480 S * 3/2019 Castro D21/369
D843,482 S * 3/2019 Holland D21/396
D843,866 S * 3/2019 Mutch D10/87
D844,062 S * 3/2019 Lesley D21/369
D849,149 S * 5/2019 Bussey D21/369
D849,150 S * 5/2019 Gallagher D21/369
D850,537 S * 6/2019 Urban D21/370
10,325,446 B2 * 6/2019 Castro G07F 17/322
D852,890 S * 7/2019 Ross D21/370
D854,620 S * 7/2019 Yeh D21/369
D854,621 S * 7/2019 Calhoun D21/369
D858,641 S * 9/2019 Legras D21/370
D858,642 S * 9/2019 Legras D21/370
- 2002/0041069 A1 4/2002 Steelman
2003/0122973 A1 7/2003 Huang
2004/0018877 A1 1/2004 Tastad et al.
2004/0029631 A1 2/2004 Duhamel
2004/0053662 A1 3/2004 Pacey
2005/0014547 A1 1/2005 Gomez et al.
2006/0009284 A1 1/2006 Schwartz et al.
2006/0028159 A1 2/2006 Otomo et al.
2006/0034042 A1 2/2006 Hisano et al.
2006/0079316 A1 4/2006 Flemming et al.
2006/0131810 A1 6/2006 Nicely
2006/0183553 A1 8/2006 Kiriya et al.
2006/0199638 A1 9/2006 Walker et al.
2006/0287111 A1 12/2006 Mitchell et al.
2008/0039213 A1 2/2008 Cornell et al.
2008/0051202 A1 2/2008 Lube
2009/0174996 A1 7/2009 Park
2010/0053231 A1 3/2010 Park
2012/0122569 A1 5/2012 Kowolik et al.
2012/0168058 A1 7/2012 Kim et al.
2013/0180653 A1 7/2013 Kim et al.
2013/0278875 A1 10/2013 Kim et al.
2014/0055696 A1 2/2014 Lee et al.
2014/0092356 A1 4/2014 Ahn et al.
2014/0176856 A1 6/2014 Lee et al.
2014/0226111 A1 8/2014 Kim
2014/0226112 A1 8/2014 Kim
2014/0354938 A1 12/2014 Kim
2014/0368782 A1 12/2014 Kim et al.
2014/0375963 A1 12/2014 Bishop
2015/0000823 A1 1/2015 Kim et al.
2015/0001291 A1 * 1/2015 Govindarajan G06Q 20/208
235/380
2015/0036073 A1 2/2015 Im et al.
2015/0087403 A1 * 3/2015 Castro G07F 17/3209
463/25
2015/0116621 A1 4/2015 Park et al.
2015/0116625 A1 4/2015 Hwang et al.
2015/0301390 A1 10/2015 Kim
2016/0070964 A1 * 3/2016 Conrad G07G 1/0018
348/150
2018/0078854 A1 * 3/2018 Achmueller A63F 13/20
2019/0080547 A1 * 3/2019 Urban G07F 17/322

FOREIGN PATENT DOCUMENTS

- KR 10-1113734 B1 2/2012
KR 10-2012-0051630 5/2012

(56)

References Cited

FOREIGN PATENT DOCUMENTS

KR	10-1268471	B1	6/2013
KR	10-1278904	B1	6/2013
KR	10-1336677	B1	12/2013
KR	10-1381609	B1	4/2014
KR	10-1381610	B1	4/2014
KR	10-2015-0013987		2/2015
KR	10-1539221	B1	7/2015
TW	200949775	A	12/2009

OTHER PUBLICATIONS

Brochure for “Virtual Pinball,” Tab-Austria, 2007 (8 pages).
 Cabinet Brochure for Hydako Co., date estimated as early as 2009 (1 page).
 Catalog for “Your Partner Innovation,” Bally Technologies, date estimated as early as 2011 (4 pages).
 Catalog for Atronice®-Spielo®, date estimated as early as 2008 (2 pages).
 Cohran; “Why Samsung’s curved-screen TV might be a ‘game changer’”; CBS News; Aug. 14, 2013; retrieved from <<http://www.cbsnews.com/news/why-samsungs-curved-screen-tv-might-be-a-game-changer/>> (3 pages).
 DailyTech; “AUO Shows Off Curved Display and Touch Screen”; May 23, 2008; retrieved from <<http://www.dailytech.com/AUO+Shows+Off+Curved+Display+and+Touch+Screen+Tech/article11845.htm>> on Mar. 3, 2017 (2 pages).
 Daniel; “Curved Monitors—Overview”; Curved Monitor Test; Aug. 28, 2015; retrieved from <<http://www.curved-monitor-test.de/>> (5 pages).
 Denison; “Why can’t you buy a flat OLED yet? The curve isn’t just about viewing experience”; Digital Trends; Aug. 18, 2013; retrieved from <<http://www.digitaltrends.com/home-theater-why-did-the-us-get-stuck-with-curved-oled/#!zXypT>> (8 pages).
 DigiTimes Inc.; “FPD China 2009: AUO 8.9-inch convex display panel”; Mar. 12, 2009; retrieved from <<http://www.digitimes.com/photogallery/showphoto.asp?ID=3376>> on Mar. 3, 2017 (3 pages).
 Fall & Winter Catalog for Aristocrat, date estimated as early as 2010-2011 (7 pages).
 Gizmodo.com; “AUO Curved Displays, Ultra Thin LCDs on the Way”; May 20, 2008; retrieved from <<http://gizmodo.com/392248/auo-curved-displays-ultra-thin-lcds-on-the-way>> on Mar. 3, 2017 (2 pages).
 Immersaview; “Why choose a Curved Screen for your Multi-Projector Setup”; Jan. 28, 2016; retrieved from <<https://www.immersaview.com/resources/why-curved/>> (7 pages).
 Kelly; “TV trends at CES: 4K, curves and smart TVs”; CNN; Jan. 8, 2014; retrieved from <<http://www.cnn.com/2014/01/07/tech/gaming-gadgets/ces-television-trends/>> (5 pages).
 Ljt216; “Flat Screen vs Curved CRTs for Retro Games”; Reddit; Jul. 29, 2015; retrieved from <https://www.reddit.com/r/gamecollecting/comments/3f25r0/flat_screen_vs_curved_crts_for_retro_games/> (4 pages).
 Manjoo; “TV Makers Are Out of Ideas”; Wall Street Journal; Jan. 8, 2014; retrieved from <<https://www.wsj.com/news/articles/SB100014240527023033938045790308801012230792>> (4 pages).

Matthias; “Curved TV—Overview”; Curved TV Test; Apr. 20, 2016; retrieved from <<http://technikblog.net/fernseher-test/curved-tv/>> (16 pages, in German).
 Morrison; “Curved OLED HDTV screens are a bad idea (for now)”; CNET; Jun. 18, 2013; reerieved from <<https://www.cnet.com/news/curved-oled-hdtv-screens-are-a-bad-idea-for-now/>> (9 pages).
 NewLaunches.com; “LG Phillips LCD develops world’s highest resolution 14.3-inch flexible color E-paper display!”; Jan. 3, 2008; retrieved from <http://newlaunches.com/archives/lgphillips_lcd_develops_worlds_highest_resolution_143inch_flexible_color_epaper_display.php> (4 pages).
 OLED-Info; “LG Phillips LCD Develops 14.3-Inch Color E-Paper Display”; Jan. 4, 2008; retrieved from <http://www.oled-info.com/lg/lg_phillips_lcd_develops_14_3_inch_color_e_paper_display>; (2 pages).
 PC World; “AU Optronics Shows off Curved LCD Screen”; May 20, 2008; retrieved from <<http://www.pcworld.com/article/146083/article.amp.html>> on Mar. 3, 2017 (3 pages).
 Photonics industry and Technology Development Association (PIDA); “E-Paper Shows Potential at Creating a Paperless Haven”; OptoLink Magazine, 3 Quarter 2008; pp. 8-11 (4 pages).
 Product Catalog for “Alpha Elite™,” Bally Technologies, date estimated as early as 2008-2009 (2 pages).
 Product Catalog for Ainsworth Game Technology Ltd, date estimated as early as 2007 (6 pages).
 Product Catalog for Bally Technologies, date estimated as early as 2010 (2 pages).
 Product Sheet for “3RV™,” WMS Gaming In., 2002 or earlier (2 pages).
 Product Sheet for “American Eagle,” Eagle Co. Ltd., 1997 (2 pages).
 Product Sheet for “American Eagle,” Eagle Co., Ltd., 2000 (2 pages).
 Product Sheet for “EVO™ Hybrid,” Bally Gaming Systems, 2002 (4 pages).
 Product Sheet for “Miss America,” AC Coin & Slot, 2002 or earlier (2 pages).
 Product Sheet for “Monopoly Chairman of the Board™,” WMS Gaming Inc., 1999 (2 pages).
 Product Sheet for “ProSLOT® 6000,” Bally Gaming Systems, 2002 (4 pages).
 Product Sheet for “Survivor,” WMS Gaming Inc., 2001 (4 pages).
 Product Sheet for “Ultrapin™,” Global VR, 2007 (1 pages).
 Snider; “Sony tosses latest pitch for curved TV displays”; USA Today; Oct. 15, 2013; retrieved from <<http://www.usatoday.com/story/tech/personal/2013/10/15/new-curved-sony-led-hdtv/2982051/>> (2 pages).
 Wilcox; “LG, Samsung, and Sony throw TV buyers a curve”; Consumer Reports; Sep. 10, 2013; retrieved from <<http://www.consumerreports.org/cro/news/2013/09/curved-tv-screens/index.htm#>> (1 page).
 Wood, M., Major, C., Carr, V. eds.; “Curved Screens: Worth It?” video found at <<http://www.nytimes.com/video/technology/personaltech/10000002788325/curved-screens-worth-it.html>>; New York Times; Mar. 26, 2014.

* cited by examiner

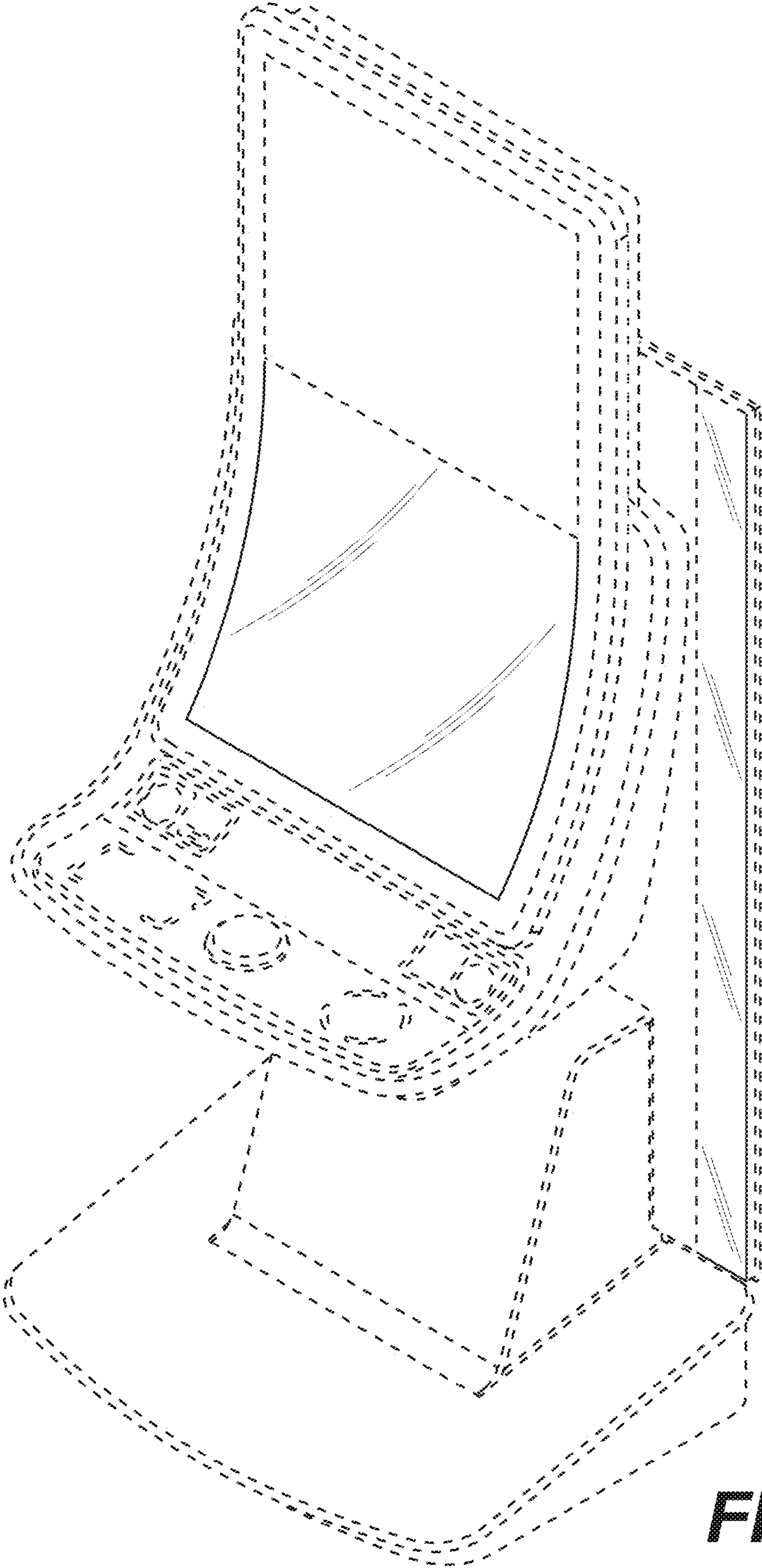


FIG. 1

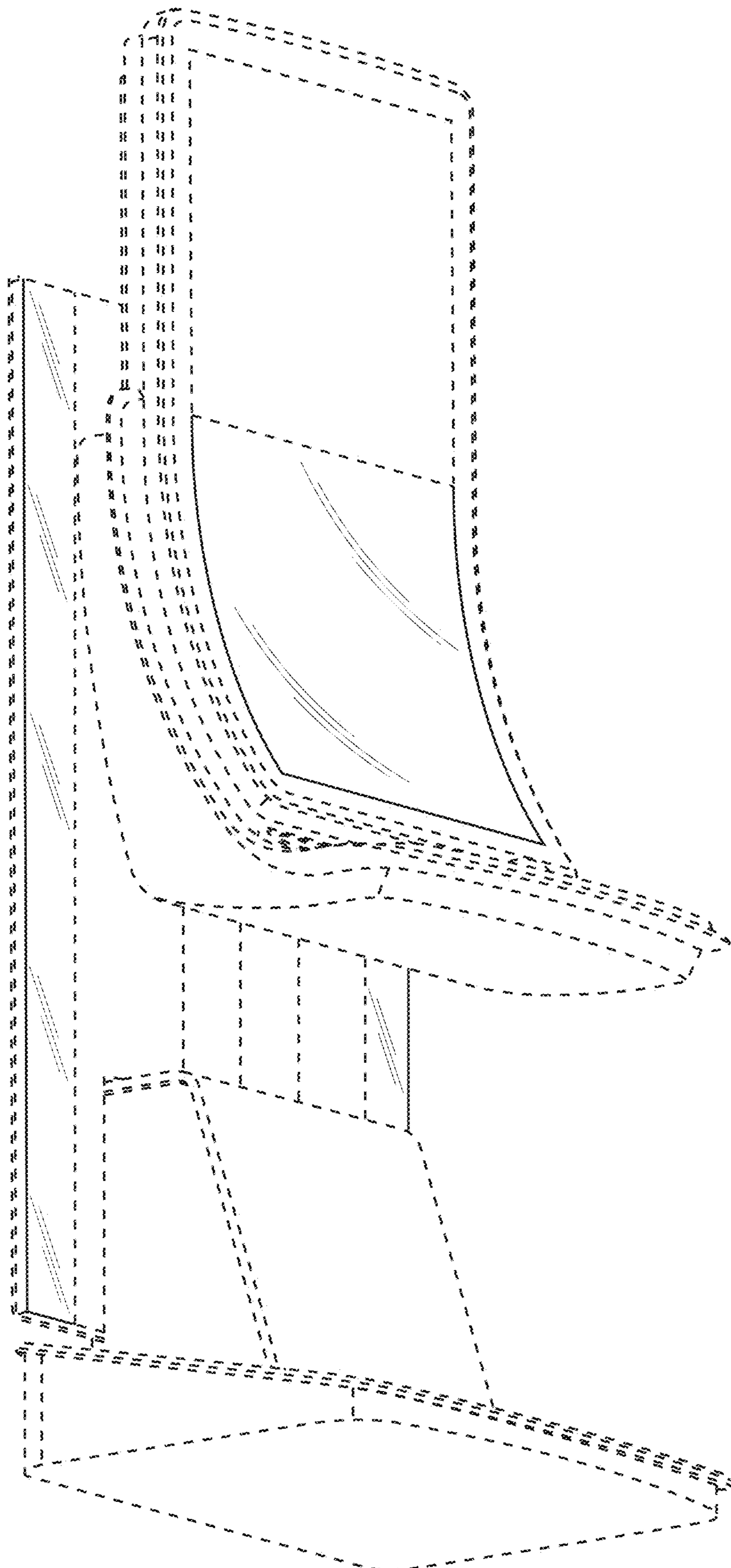


FIG. 2

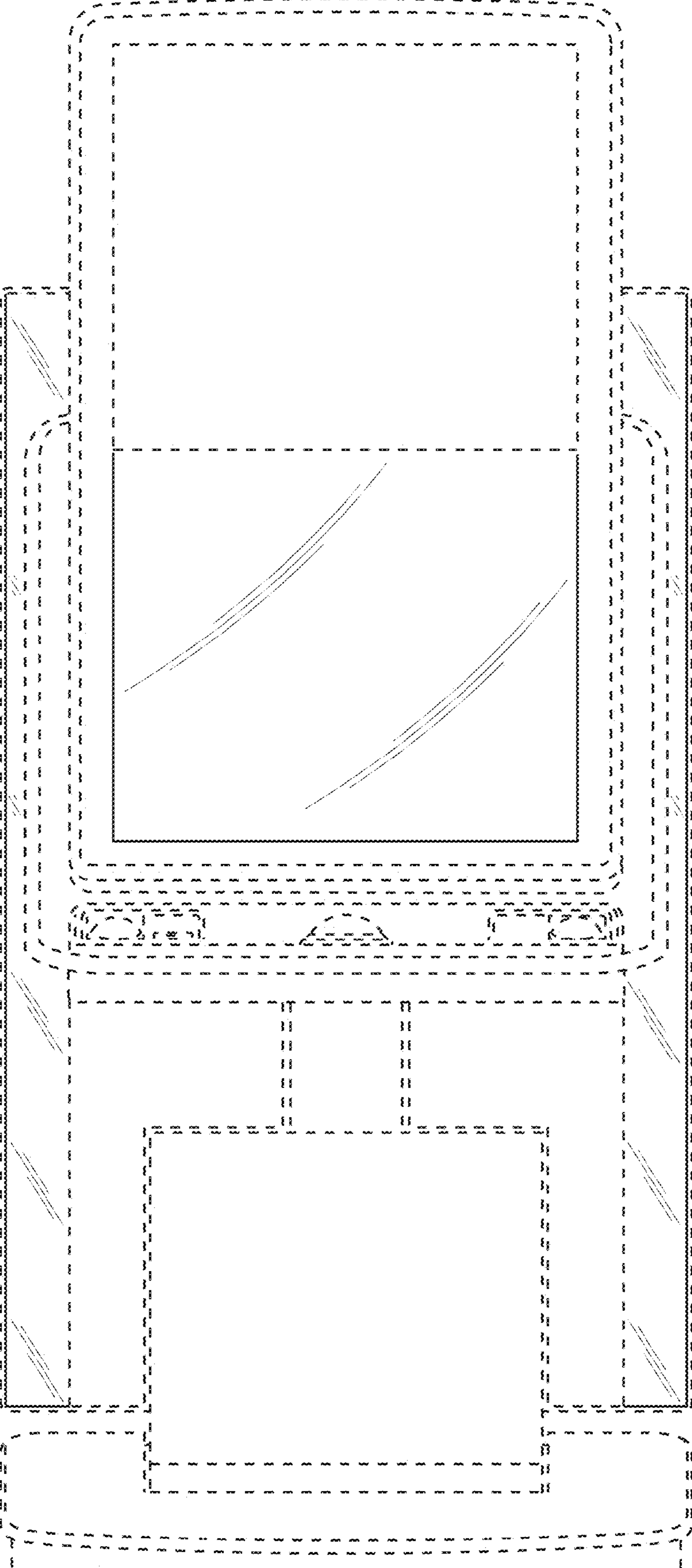


FIG. 3

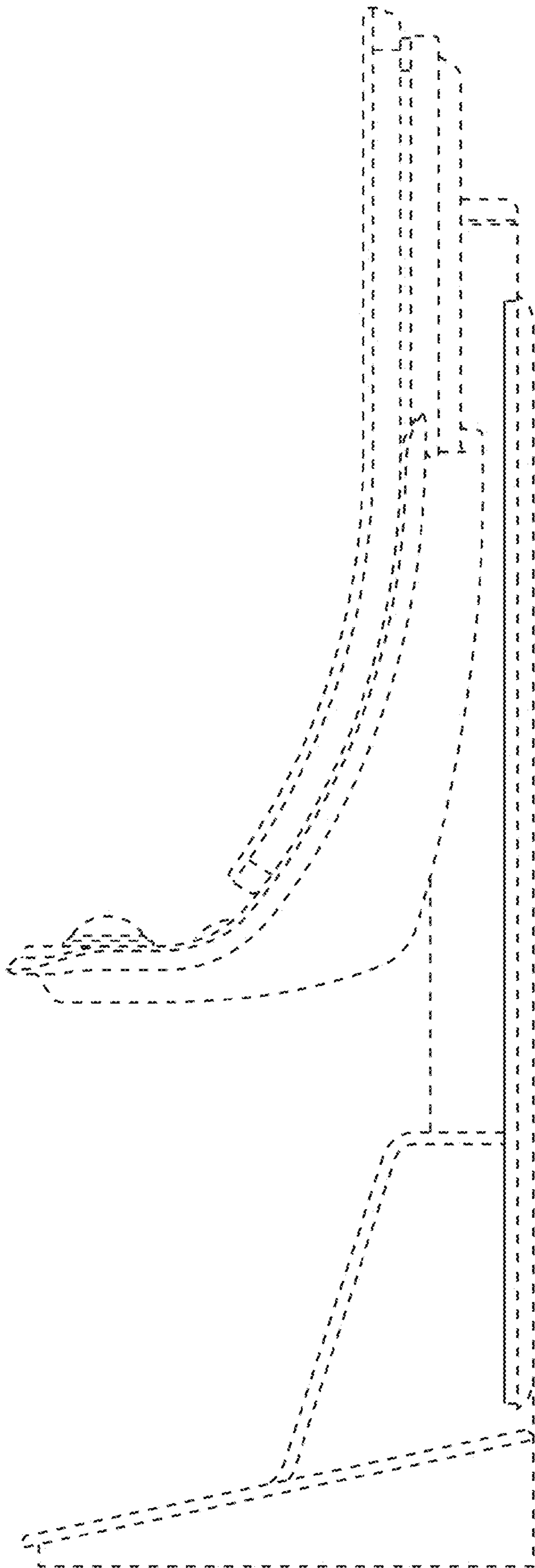


FIG. 4

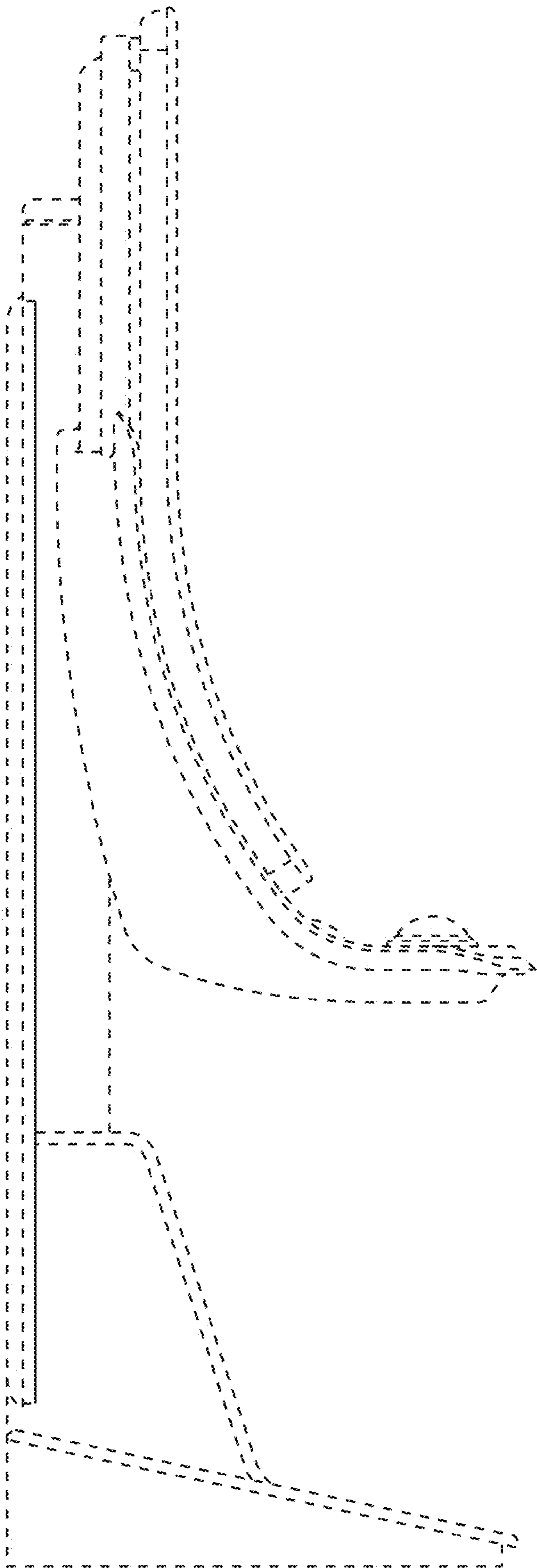


FIG. 5

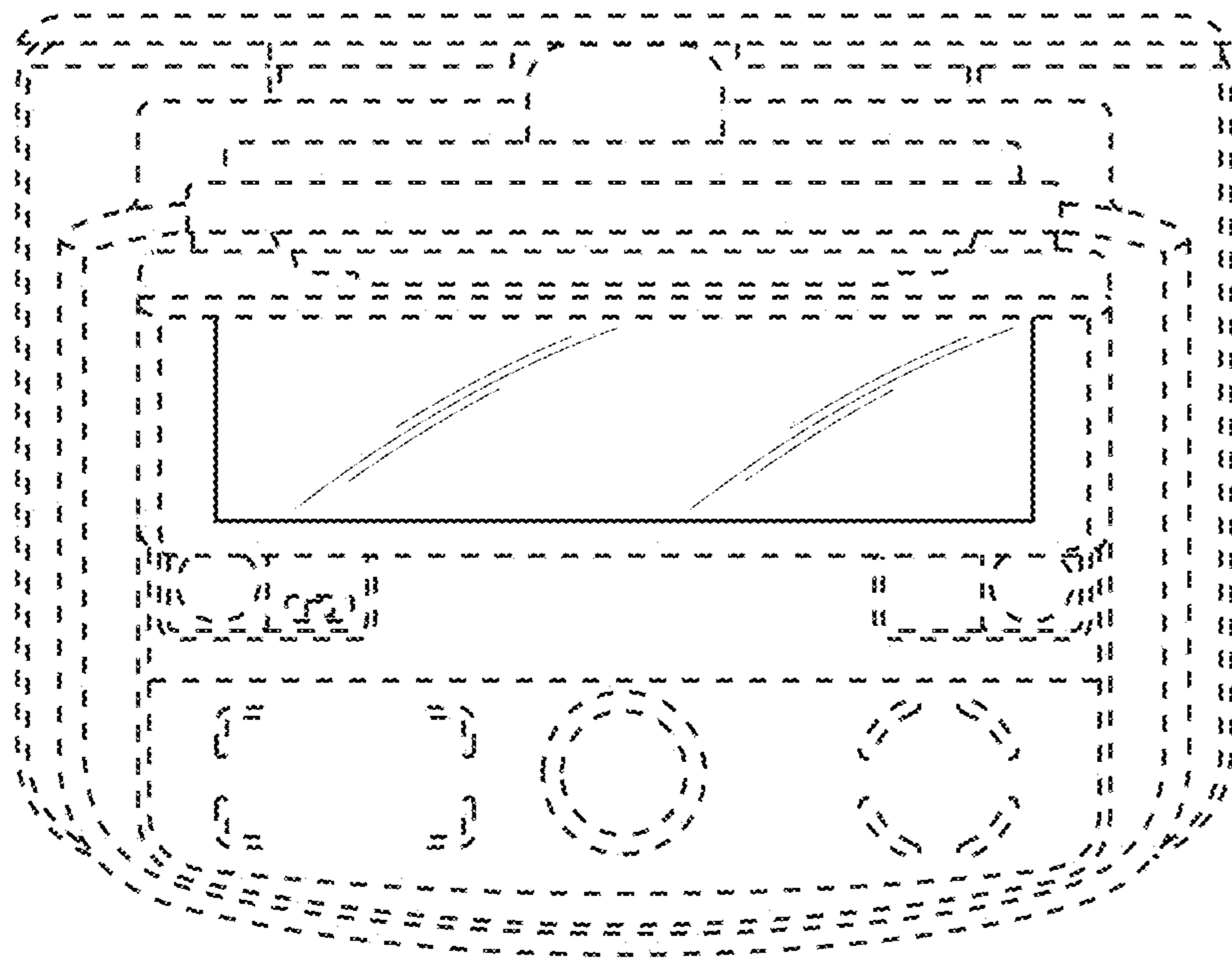


FIG. 6